

Abstract

A method and a device are described for detecting the phase of a four-stroke gasoline engine, a gasoline direct
5 injection engine in particular. For reliable phase detection involving relatively little expense during a starting phase, a crankshaft is turned together with at least one piston; ignition is triggered via an ignition coil (2) in at least two successive top dead centers (I-TDC, CC-TDC) of the
10 piston without a supply of fuel; a primary current or a secondary current, or a primary voltage or a secondary voltage are measured in a measuring period which extends at least over a spark duration ($t_{BR-I-TDC}$, $t_{BR-CC-TDC}$) after the ignition, and, from the comparison of the measuring
15 signals of successive ignitions, a conclusion is drawn as to which of the successive top dead centers is an ignition top dead center (I-TDC) and which is a charge cycle top dead center (CC-TDC). (Figure 1)